

EXPRESS MAIL NO. EF321691826USWhat is Claimed is:

1 1. A method for driving an electric actuator unit with a polarity-dependent actuation
2 direction comprising:
3 supplying the actuator unit with electrical energy having a polarity that determines
4 the actuation direction and which corresponds to a condition that is fulfilled; and
5 activating the actuator unit in at least one of the actuation directions only when a
6 further condition, which is independent of the state of the actuator device or a device
7 actuated by it, is also fulfilled.

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2 2. A device for driving an electric actuator unit by means of a driving unit,
3 comprising:
4 the driving unit comprising:
5 a voltage supply input;
6 at least one polarity control input;
7 at least two voltage outputs, the polarity of a signal at the voltage outputs
8 depending on the supplying of the at least one polarity control input with a signal and a
9 control input; and
10 the actuator unit comprising a drive motor and at least two voltage inputs
11 which are operatively coupled to said at least two voltage outputs, the drive direction of
12 the drive motor being determined by the polarity of the signal at the at least two voltage

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13 inputs and the drive motor being operated in at least one of the drive directions only when
14 the control input is supplied with a predefined control signal.

1 3. The device as claimed in claim 2, wherein the driving unit has a control output
2 which is connected to the control input, and the actuator device has a second control input
3 which is connected to the control output and is connected to an electronic unit which
4 operates the drive motor.

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1 4. The device as claimed in claim 3, wherein the electronic unit is connected, for its
2 voltage supply, to at least two voltage inputs of the actuator unit via a rectifier bridge.

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1 5. The device as claimed in one of claims 2 to 4, further comprising:

2 first and second polarity control inputs which actuate first and second
3 change-over switches, respectively, the first change-over switch connecting, in the
4 signalless state of the associated polarity control input, a first of said at least two voltage
5 output to ground via a measuring resistor and to the voltage input in the state in which a
6 signal is supplied; and

7 the second change-over switch connecting, in the signalless state of the
8 associated polarity control input, the second of said at least two voltage outputs to
9 ground, and to the voltage input in the state in which a signal is supplied.

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1 6. The device as claimed in claim 5, wherein it is possible to carry out a diagnosis of
2 the system in one position of the first and second change-over switches in which the
3 measuring resistor has current flowing through it when the drive motor is supplied with
4 voltage

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1 7. The device as claimed in claim 2, wherein the actuator unit is a unit for locking the
2 steering mechanism electrically in a motor vehicle, and the drive motor for locking the
3 steering mechanism is capable of being operated only if the control input is supplied with
4 a signal which signals a stationary state of the vehicle.

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1 8. The device as claimed in claim 7, wherein it is possible to carry out a diagnosis of
2 the system in the state in which the drive motor is supplied with voltage in the direction
3 of releasing the steering mechanism.

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1 9. The device as claimed in claim 6, wherein it is possible to carry out a diagnosis of
2 the system in the state in which the drive motor is supplied with voltage in the direction
3 of releasing the steering mechanism.

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